AMENDMENTS TO DRAWINGS:

The attached sheet of drawings includes changes to Fig. 4. This sheet replaces the corresponding original sheet. In Fig. 4, the text in S105 has been changed from "CHANGE PRINT IMAGE?" to "PRINT IMAGE SET?"

REMARKS

Claims 1-40 are pending, independent claims 1, 14, 25, 38 and 39 having been amended as explained below. Reconsideration is respectfully requested in light of the amendments and remarks made herein.

In response to the Examiner's objection to the drawings, applicants have amended the specification to include reference to S114 in the description of Fig. 5, and have also amended the specification to identify the clickable buttons 232-235 and 246 shown in Figs. 11 and 13. No new matter has been added by way of these amendments to the specification, as each such amendment is commensurate with that which is shown in the drawing(s) to which it refers.

Applicants have also amended the paragraph describing Fig. 4 to correspond with a proposed amendment to the text in block S105 of that figure. Specifically, applicants propose to amend the text in that block from "change print image?" to "print image set?" It is submitted that these amendments are directed solely to matters of form and clarity and that they add no new matter.

Applicants have also amended the first paragraph in the "Objects of the Invention" section to improve the grammatical form and clarity of the statement. No new matter has been added.

Turning now to the art rejections, independent claim 1 has been rejected under 35 U.S.C. § 103(a) based on US patent 4,422,765 to *Hoffman* in view of US patent 5,493,386 to *Thompson*. Independent claims 14 and 25 stand rejected under § 103(a) on this base combination of references further in view of US patent 5,592,298 to *Caruso* and US patent 6,381,348 to *Takeo*. Independent claims 38 and 39 have been rejected under § 103(a) on the base combination of *Hoffman* and *Thompson* further in view of US patent 6,377,359 to *Higasho*. Each dependent claim is also rejected under 35 U.S.C. § 103(a) based on at least the combination references used to rejected its independent claim; for some dependent claims additional references are applied.

The primary reference, *Hoffman*, is directed to a method for predicting how much ink will be consumed in the subsequent printing of a particular image. However, the ink consumption prediction method described in this reference is

for off-set printing, whereas the invention involves dot-based printing. As a result of this difference, the manner in which the ink consumption prediction is performed in *Hoffman* is different from that of the present invention. More importantly, the manner in which the ink usage prediction is used in the present invention is not disclosed nor taught by *Hoffman*, as explained below.

The other main reference, *Thompson*, is directed to an apparatus for reproducing an electronically scanned original image in two or more colors. The reference is cited to show various components of an image reproduction system. No ink consumption determination is made in the operation of this system.

Caruso is directed to a technique for estimating the number of pixels in a digital image so as to predict or manage toner/ink usage. The background of this patent describes other pixel counting and ink usage estimation methods. However, *Caruso* lacks any teaching of employing ink usage estimation in connection with logo data generation in the manner contemplated by the present invention, as explained below.

Takeo is directed to a network system for medical images. The system includes means for determining whether or not image information input into the system has been processed or not based on a reading of a header or data portion of the image information. Means for judging image quality are also included. There is no discussion regarding predicted ink usage in printing an image.

While these references collectively indicate that various methods of calculating/estimating the amount of ink that would be consumed in printing a particular image are known, none of the references teach simultaneously displaying logo data and the amount of ink that would be required to print that logo data, and updating or recalculating the ink usage information each time the logo data is edited in substantially real-time. This feature is now recited in each of independent claims 1, 14 and 25.

Embodiments of this inventive feature are disclosed in the application, e.g., Fig. 7, in which the ink dot count is shown on bar 31 and logo data 33 is displayed below. In another embodiment, ink usage for each color in a logo is

displayed along with the logo, as in Fig. 5. If the logo is changed, the ink usage information is likewise changed, and both changes are reflected on the display.

With this inventive feature, when a logo designer edits the logo data in a meaningful way, the designer can see almost immediately the effect that modification has on the amount of ink that would be used in printing that version of the logo data. Thus, the logo designer can design an appropriate logo, taking into account both the visual aesthetics of the logo as it appears on the display and the ink that would be consumed if that logo were printed. By generating logo data and calculating an amount of ink to print that logo data, the invention advantageously enables the logo designer to obtain a desired balance between ink consumption and output quality. None of the cited references teach this feature.

Each of claims 38 and 39 require that either or both of calculated ink usage or logo data size be displayed and updated in response to the editing of logo data, which is simultaneously displayed. Still, none of the cited references teach any of the variations that these claims cover.

Accordingly, it is respectfully submitted that each of the independent claims is patentably distinguishable over the cited references for the reasons stated above, and that each dependent claim is patentable for at least the same reasons as its independent claim.

In view of the foregoing amendments and remarks, Applicants respectfully request favorable reconsideration of the present application.

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